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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,043	07/11/2003	Yasutomo Watanabe	01272.020596.	3066
5514	7590	10/13/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			GORDON, RAQUEL YVETTE	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/617,043	WATANABE, YASUTOMO
	Examiner	Art Unit
	Raquel Y. Gordon	2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

## Disposition of Claims

4)  Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-12 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 11 July 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/8/2003.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For example the terms "the same kind" (two occurrences in claims 1 and 7) lack antecedent basis.

Claims 2-6 and 8-12 depend from rejected base claims and are thus rejected.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Koizumi et al. (US 5760797). Koizumi et al. teach every element of the instant claims including:

1. A printing head for ejecting ink, comprising: a printing element board (12) including an energy generating element (411A) for generating energy used for ejecting the ink; a wiring board (see figs 8 and 13) used for supplying an electric signal or an electric power from an apparatus main body to said printing element board, said wiring board

(col 7, ln 22) including an electrode wiring line connected with an electrode of said printing element board to supply the electric signal or an electric power (col 8, lns 51-56); and a supporting member supporting said printing element board, said supporting member being formed with an electrode wiring line (446) for connecting the electrode wiring lines (446), which supply the electric signal of the same kind or the electric power of the same kind, with each other among the electrode wiring lines (446) connected with the electrode of said printing element board (see figs 8, 13, 14, and 18).

2. A printing head as claimed in claim 1, wherein the electrode wiring line (446) in said supporting member is formed on said supporting member (IJC, and fig 18).

3. A printing head as claimed in claim 1, wherein the electrode wiring line in said supporting member is formed inside said supporting member and only a part of said electrode wiring line which connects with the electrode wiring line of said wiring board is exposed (see fig 14, IJC, and fig 18);

4. A printing head as claimed in claim 1, wherein said wiring board is sandwiched between said supporting member and a board forming outermost surface of said printing head (see fig 14);

5. A printing head as claimed in claim 1, wherein the connection of the electrode wiring line of said wiring board with the electrode of said printing element board is made in a

state in which said electrode wiring line is entirely covered with said wiring board (see fig 20, 445, 446, and col 18, lns 26-34);

6. A printing head as claimed in claim 1, wherein the energy generating element generates thermal energy to generate a bubble in the ink and the ink is ejected by pressure of the bubble (see col 17, lns 52-62);

7. An ink jet printing apparatus which employing a printing head to eject ink to a printing medium for performing printing, wherein the printing head comprises: a printing element (12) including an energy generating element (411A) for generating energy used for ejecting the ink; a wiring board (see fig 8, 13) used for supplying an electric signal or an electric power from an apparatus main body to said printing element board (12), said wiring board (12) including an electrode wiring line connected with an electrode of said printing element board to supply the electric signal or an electric power (col 18, lns 51-56); and a supporting member supporting said printing element board, said supporting member (IJC) being formed with an electrode wiring line (446) for connecting the electrode wiring lines (446), which supply the electric signal of the same kind or the electric power of the same kind, with each other among the electrode wiring lines (446) connected with the electrode of said printing element board (see figs 8, 13, 14, and 18);

8. An ink jet printing apparatus as claimed in claim 7, wherein the electrode wiring line (446) in said supporting member is formed on said supporting member (IJC, see fig 18);

9. An ink jet printing apparatus as claimed in claim 7, wherein the electrode wiring line in said supporting member is formed inside said supporting member and only a part of said electrode wiring line which connects with the electrode wiring line of said wiring board is exposed (see fig 14, IJC and Fig 18);
10. An ink jet printing apparatus as claimed in claim 7, wherein said wiring board is sandwiched between said supporting member and a board forming outermost surface of said printing head (see fig 14);
11. An ink jet printing apparatus as claimed in claim 7, wherein the connection of the electrode wiring line of said wiring board with the electrode of said printing element board is made in a state in which said electrode wiring line is entirely covered with said wiring board (see fig 20, 445, 446, and col 18, lns 26-34);
12. An ink jet printing apparatus as claimed in claim 7, wherein the energy generating element generates thermal energy to generate a bubble in the ink and the ink is ejected by pressure of the bubble (see col 17, lns 25-62).

***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Raquel Y. Gordon, whose telephone number is (571) 272-2145. The Examiner can normally be reached on M Tu Th and F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. A fax number is available upon request.

Any inquiry of a general nature or relating to the status of this application or proceeding may be directed to the Examiner or Supervisor.



Raquel V. Gordon  
Primary Examiner  
Art Unit 2853  
September 26, 2004

**RAQUEL GORDON**  
**PRIMARY EXAMINER**